

**Presented to: NASA Project Management Challenge** 

February 26-27, 2008

**K.** Lee Pagel and Vanessa Beene





### **Purpose and Objectives**



- Discuss initiative at Johnson Space Center to align SEB processes to project management principles:
  - Sources of Feedback
  - Results of Feedback
  - The Project Cycle
  - Project Management Elements
    - Common Vocabulary
    - Teamwork
    - The Project Cycle
    - Requirements
    - Project Planning & Control
- Discuss other source selection initiatives currently underway at JSC



## **Acknowledgement**



• The model for project management used in this presentation is taken from *Visualizing Project Management*, by Forsberg, Moog, and Cotterman.



#### **Sources of Feedback**



- Receiving extensive feedback on Acquisition process:
  - Routine feedback sought from Industry at public events (Industry Day, Pre-proposal conferences)
  - Benchmarking activities with industry over the last year
  - Routine lessons learned gleaned from exiting SEB Chairs
  - Internal assessment from JSC Office of Analysis and Assessment (OAA) on Source Selection process and procurement processes
  - Included assessment by Booz Allen Hamilton, comparing JSC to other procuring organizations
  - Anonymous survey data from procurement employees
- Still digesting this enormous volume of information. Some highlights:
  - Early requirements definition critical
  - Schedule management needs work
  - Review process needs examination
- Knowledge capture initiative
  - Assign exiting COs after completion of source board to APAT for short period of time
    - Update templates, work instructions with latest experience
    - Assist in counseling incoming Chairs, COs on how-to info
  - Establishing lessons learned database
  - Considering ways to solicit lessons learned info real-time from Chairs and COs during SEB



### **Results of Feedback — Some Themes**



- SEB Chairs are schedule-focused, and process-frustrated
  - Process is unknown
  - Attempts to understand the process highlight the variations
  - Responsible for schedule, yet lacking control of stages of the process (like reviews)
- They expressed a strong desire for
  - Consistency
  - Templates of standard products
  - Some semblance of control over external activities
  - Understanding of the full cycle



## "What is to be done?"



- Caveat A lot of excellent work has already been done
- Since most SEB Chairs come from Project Management:
  - Visualized the SEB Cycle as a project
  - Considered our team, Acquisition Planning Advisory Team, as managers of a group of project managers
  - Modeled our role as:
    - Facilitators of the "Project" (SEB) Cycle
    - Owners of certain scarce resources
    - Owners of certain mandatory processes (FAR, Center Procedures)
    - Provider of tools, training, logistics, and experience
- Repackaged procedures and initiatives
- Designing new activities where gaps are perceived



# **Common Vocabulary**



- Establish generic WBS for SEBs
  - Utilize in preparing generic master schedule template
  - Build a WBS dictionary over time, providing common definition for SEB-related terms
- Provide starting point for common documents
  - Templates for PSM, Comp Range, Source Selection
  - Do not provide "cold" to SEBs, provide with advice
  - Emphasize that a template is a starting point, not the end
- Build vocabulary through exposure
  - Common training, both basic SEB class and just-in-time training modules



#### Teamwork



- In order to include reviewers (procurement and legal) in the "team," need to consider imbedded reviewers
  - Dependent on reviewer resources
  - For JSC Acquisition Planning and Advisory Team (APAT), we are attempting to establish one person that is assigned to an SEB, but not imbedded
- Well defined responsibilities enhances the growth of mutual respect
  - Activity underway to define the roles and responsibilities of reviewers in the JSC procurement process
  - Carefully define the standards for SEB products: Findings, Reports, Presentations
    - Good initial product reduces review time, increases respect on both sides of the review process
    - Tailor training packages and templates to emphasize product standards



## The Project Cycle



- Make Chairs aware of the SEB cycle A Series of Gates
  - Accomplished through the master schedule template and WBS, which are major milestonebased
  - APAT counseling emphasizes both upcoming major milestone and how it fits into overall cycle
- JSC has established new joint HQ/JSC concurrent review board for major SEB documents (Senior Advisory Review)



### Requirements



- For most source selections, the three most important things to remember are requirements, Requirements, REQUIREMENTS!
- Requirement definition needs to begin earlier and demand more attention
- Historically, the majority of schedule slips in SEBs occur at the beginning of the process, during requirements definition
- Greater understanding of your need leads to
  - Better understanding of the contractor you want
  - Better definition of discriminators, that leads to better Section M
  - That leads to a focused, compact Section L and resulting proposals
  - Providing faster evaluation, review and selection.
- To increase focus on this at JSC, we are establishing Requirements Development Teams (RDT) to address this critical issue earlier.
- Using new Roadmap from SOMD/ESMD to assist in managing early stages of requirements planning
- Considering training of procurement personnel in Systems Engineering basics to allow us to "sling the lingo" with our customers in this area



## **Multiplier Effect of Good Requirements**



Process Evaluation
Results for that Requirement

Proposal Evaluation
Process for that Requirement

Proposal Writing Process for that Requirement

Section L Proposal Instruction for that Requirement

Section M Selection Criteria for that Requirement

Original Requirement



### **Project Planning and Control**



- Use master schedule template as starting point for new SEBs
  - APAT assists in customizing schedule for individual boards
  - Point out common bottlenecks on schedule
- Common WBS provides resource planning for scarce resources (reviewers)
- Routine reviews with Chairs maintain focus on current schedule performance and awareness of upcoming bottlenecks
- This consistent approach to schedule will also yield detailed performance data for future analysis of the SEB process, permitting next wave of initiatives



#### Other SEB-related Initiatives at JSC



- Blatantly "leveraging" from NASA best practices:
  - Utilizing Acquisition Evaluation Software (AES) developed at Goddard for evaluation tool (to replace FedSelect)
  - Utilizing Acquisition Planning Tool (APT) developed at Marshall to provide greater information earlier to industry planners
- Increased staffing to APAT, emphasizing counseling and guidance role as a resource to SEB Chairs and COs
- Established team web site to keep APAT activities consistent across SEBs
- APAT calendar to assist reviewers in planning scarce resources
- Strategic planning for logistics to SEB facilities
  - IT (printers, projectors, MS Project)
  - Upgrades to facilities (currently have 5 SEB buildings)
  - Applying consistent approach to logistics across all facilities
- Integrate existing RBAM activities more closely to the project's Risk management activities